

CLAIMS

What is claimed is:

1. A system for transmitting forward link transponder assignments to a mobile platform comprising:

5 at least one receiver on the mobile platform;
at least one transmitter on the mobile platform;
at least one transponder in communication with the receiver, the transponder comprising return link assignments;
at least one ground station in communication with the receiver, the
10 ground station comprising a master forward link transponder assignment list; and
a default transponder assignment table loaded on the receiver, the default transponder assignment table comprising a default forward link transponder assignment table,

15 wherein when the transmitter transmits a signal to the transponder based on the default transponder assignment table, the transponder transmits the return link assignment to the receiver, and the transmitter transmits a signal to the ground station via the transponder such that the ground station transmits a correct forward link assignment via the transponder to the receiver.

2. The system of Claim 1, wherein the transponder is on a satellite.

20 3. The system of Claim 2, wherein the master forward link transponder assignment list comprises a plurality of transponders on a plurality of satellites for a plurality regions around the world.

4. The system of Claim 3, wherein the ground station communicates with the receiver through a forward link from the ground station to the satellite, such that the transponder transmits the correct forward link transponder assignment to the mobile platform.

5. The system of Claim 3, wherein the plurality of transponders are prioritized by the ground station such that the receiver can be tuned to another transponder in the event of a transponder failure.

6. The system of Claim 3, wherein the plurality of satellites are prioritized by the ground station such that the receiver can be tuned to transponder on another satellite in the event of a satellite failure.

7. A system for transmitting forward link transponder assignments from at least one transponder to a plurality of mobile platforms comprising:

at least one piece of receiver equipment on the mobile platform; and
at least one piece of communications equipment on the mobile

5 platform,

wherein when the piece of communications equipment transmits the forward link transponder assignments to the piece of receiver equipment when the piece of receiver equipment loses at least one forward link assignment.

8. The system of Claim 7, further comprising:

10 at least one ground station in communication with the mobile platform via the transponder, the ground station comprising a master forward link transponder assignment list; and

15 a default transponder assignment table loaded on the piece of communications equipment, the default transponder table comprising a default forward link transponder assignment table,

wherein when the piece of receiver equipment is inoperable, the piece of communications equipment transmits a signal to the transponder based on the default transponder assignment table, the transponder transmits a return link assignment to the piece of communications equipment, and the mobile platform 20 transmits a signal to the ground station via the transponder such that the ground station transmits a correct forward link assignment via the transponder to the piece of communications equipment.

9. The system of Claim 8, wherein the transponder is on a satellite.

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10. The system of Claim 9, wherein the master forward link transponder assignment list comprises a plurality of transponders on a plurality of satellites for a plurality of regions around the world.

11. The system of Claim 10, wherein the ground station communicates
5 with the receiver through a forward link from the ground station to the satellite, such that the transponder transmits the correct forward link transponder assignment to the mobile platform.

12. The system of Claim 10, wherein the plurality of transponders are prioritized by the ground station such that the receiver can be tuned to another
10 transponder in the event of a transponder failure.

13. The system of Claim 10, wherein the plurality of satellites are prioritized by the ground station such that the receiver can be tuned to transponder on another satellite in the event of a satellite failure.

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14. A method of transmitting forward link transponder assignments to a mobile platform comprising the steps of:

- (a) loading a default forward link transponder assignment table onto a receiver of a mobile terminal of the mobile platform;
- 5 (b) transmitting a signal from a transmitter of the mobile terminal to at least one transponder listed in the default transponder assignment table;
- (c) transmitting a return link assignment from the at least one transponder to the receiver of the mobile terminal;
- (d) transmitting a signal from the transmitter to a ground station via the transponder requesting correct forward link transponder assignments;
- (e) transmitting the correct forward link transponder assignments from the ground station via the transponder to the receiver; and
- (f) retuning the receiver to the correct transponders based on the correct forward link transponder assignments.

15. The method of Claim 14, wherein the step of transmitting the correct forward link transponder assignment is accomplished through a forward link from the ground station to the satellite, such that the transponder transmits the correct forward link transponder assignment to the mobile platform.

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16. A method of transmitting forward link transponder assignments to a mobile platform having a failed receiver, the method comprising the steps of:

- (a) loading forward link transponder assignments onto a piece of communications equipment of the mobile platform;
- 5 (b) transmitting a signal from the piece of communications equipment to a piece of receiver equipment,
wherein the signal comprises forward link transponder assignments.

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17. A method of tuning receivers to a transponder tuned by a failed receiver comprising the steps of:

- (a) loading a plurality of priority sets of forward link transponder assignments on a ground station;
- (b) loading a plurality of priority satellites on a ground station;
- (c) re-tuning the receivers to a first priority set of transponders until the transponder is tuned;
- (d) re-tuning the receivers to a second priority set of transponders until the transponder is tuned if step (c) fails to tune the transponder;
- (e) repeating step (d) for additional priority sets of transponders until the transponder is tuned;
- (f) re-tuning the receivers to a first priority satellite if step (e) fails to tune the transponder;
- (g) re-tuning the receivers to a second priority satellite if step (e) fails to tune the transponder; and
- (h) repeating step (g) for additional priority sets of transponders until the transponder is tuned.